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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/790,388	03/01/2004	Wolfgang Becker	3926.069	1106	
30448	7590 09/20/2006		EXAMINER		
AKERMAN SENTERFITT			ELVE, MARIA ALEXANDRA		
P.O. BOX 3188 WEST PALM BEACH, FL 33402-3188			ART UNIT	PAPER NUMBER	
	,		1725		
			DATE MAILED: 09/20/2006		

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
Office Action Commence	10/790,388	BECKER ET AL.				
Office Action Summary	Examiner	Art Unit				
	M. Alexandra Elve	1725				
The MAILING DATE of this communication app Period for Reply	pears on the cover sheet with the c	orrespondence ad	dress			
A SHORTENED STATUTORY PERIOD FOR REPL' WHICHEVER IS LONGER, FROM THE MAILING D.  - Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period of Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tin will apply and will expire SIX (6) MONTHS from a, cause the application to become ABANDONE	N. nely filed the mailing date of this co D (35 U.S.C. § 133).				
Status						
1)⊠ Responsive to communication(s) filed on 14 Ju	ulv 2006.					
	action is non-final.					
3) Since this application is in condition for allowa		secution as to the	merits is			
closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims						
4)⊠ Claim(s) <u>7-10 and 12-16</u> is/are pending in the	application.					
• • • • • • • • • • • • • • • • • • • •	4a) Of the above claim(s) is/are withdrawn from consideration.					
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>7-10 and 12-16</u> is/are rejected.						
7) Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction and/o	r election requirement.					
Application Papers						
9)⊠ The specification is objected to by the Examine	25					
10)⊠ The drawing(s) filed on <u>01 March 2004</u> is/are: a)⊠ accepted or b)□ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correct			R 1.121(d).			
11) The oath or declaration is objected to by the Ex	= : :					
Priority under 35 U.S.C. § 119						
12)⊠ Acknowledgment is made of a claim for foreign	priority under 35 U.S.C. § 119(a	)-(d) or (f).				
a) ☑ All b) ☐ Some * c) ☐ None of:						
	1. Certified copies of the priority documents have been received.  2. Certified copies of the priority documents have been received in Application No					
<u> </u>						
· · · · · · · · · · · · · · · · · · ·	3. Copies of the certified copies of the priority documents have been received in this National Stage					
	application from the International Bureau (PCT Rule 17.2(a)).					
* See the attached detailed Office action for a list of the certified copies not received.						
Attachment(s)	_					
1) Notice of References Cited (PTO-892)	4) Interview Summary					
2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08)	Paper No(s)/Mail Da 5) Notice of Informal F					
Paper No(s)/Mail Date	6) Other:	• •				

### **DETAILED ACTION**

## Specification

The disclosure is objected to because of the following informalities: claims (see paragraph 0008) cannot be used in the specification because they may change during prosecution and thus the specification fails to meet the enablement requirement.

## Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 7, 9-10 & 14-15 are rejected under 35 U.S.C. 102(b) as being anticipated by Xie et al. (USPN 6,608,278).

Xie et al. discloses lap welding of layered plates having high quality (porosity free) welds. An energy source (laser beam) is split into multiple beams and is used to weld the coated materials having a zero gap at the interface. The sheets may be coated with organic or inorganic coatings. Examples are steel sheet coated with zinc (on one or both sides). Individual laser spots are approximately 0.4mm in diameter. Welding trials were conducted using a beam focal length of about 150mm over a range of focus sizes (0-2 mm) and welding speeds for 5.2 to 7.1 m/min. (abstract, figure, col. 2, lines 6-67, col. 3, lines 1-41, col. 5, lines 5-15)

# Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Xie et al., as stated above and further in view of the following:

Although Xie et al. discloses the use of organic coatings, the use of plastic plates is not specifically taught.

The types of materials chosen are a choice in design and substitution of known equivalent structures may be made. In re Kuhle 188 USPQ 343 (CCPA 1958). Thus it would have been obvious to one of ordinary skill in the art at the time of the invention to weld coated plastic sheet materials.

Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Xie et al., as stated in an above paragraph and further in view of Coyle, Jr. et al. (USPN 5,268,556).

Xie et al. does not teach scanning of the laser beam.

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Coyle, Jr. et al. discloses a two step laser welding process in which the first step is to vaporize a portion of plating, such as gold plating on Kovar<sup>TM</sup> and thereafter using the same laser for making the weld. The laser beam scans the area of the coating to vaporize it. (abstract, col. 1, lines 63-68, col. 3, lines 18-31)

It would have been obvious to one of ordinary skill in the art at the time of the invention to scan the laser, as taught by Coyle, Jr. et al. in the Xie et al. process because ensures complete removal of the coating in the desired area.

Claims 12-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Xie et al., as stated in an above paragraph and further in view of Mombo-Caristan (USPN 5,603,853).

Xie et al. does not teach spinning of the laser beam or a step seam.

Mombo-Caristan discloses the welding of two sheets using laser radiation. Figure 4 displays a step weld or lap weld. Figure 5D exhibits a weld trace whereby there is spinning of the laser beam. (abstract, figures, col. 6)

It would have been obvious to one of ordinary skill in the art at the time of the invention to create a step weld or use spinning of the laser beam as taught by Mombo-Caristan in the Xie et al. process because these are all drawn to welding and are merely variations of joint profiles and techniques.

## Response to Arguments

Applicant's arguments filed 7/14/06 have been fully considered but they are not persuasive.

Applicant argues that Xie et al. does not teach use of the same laser or changes in speed. The examiner respectfully disagrees because Xie et al. does use the same laser and the laser is capable of altered speeds.

#### Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to M. Alexandra Elve whose telephone number is 571-272-1173. The examiner can normally be reached on 6:30-3:00 Monday to Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick J. Ryan can be reached on 571-272-1292. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

September 17, 2006.

M. Alexandra Elve

Primary Examiner 1725